EQUIPMENT AVANTCO

User Manual

Gear Driven 30 Qt. Commercial Mixer

Models: MX30

Shifting gears while this unit is running will void warranty.

08/2015

Please read and keep these instructions. Indoor use only.

Index

Parts Overview 3

Standard Accessories..... 4

Operation Instructions 4

Figure 1: Gear Axle 5

Figure 2: Initiative Axle 6

Figure 3: Fork 7

Figure 4: Change Speed Axle..... 8

Figure 5: Turning Plate and Mixing Axle 9

Figure 6: Single Phase Motor Diagram 10

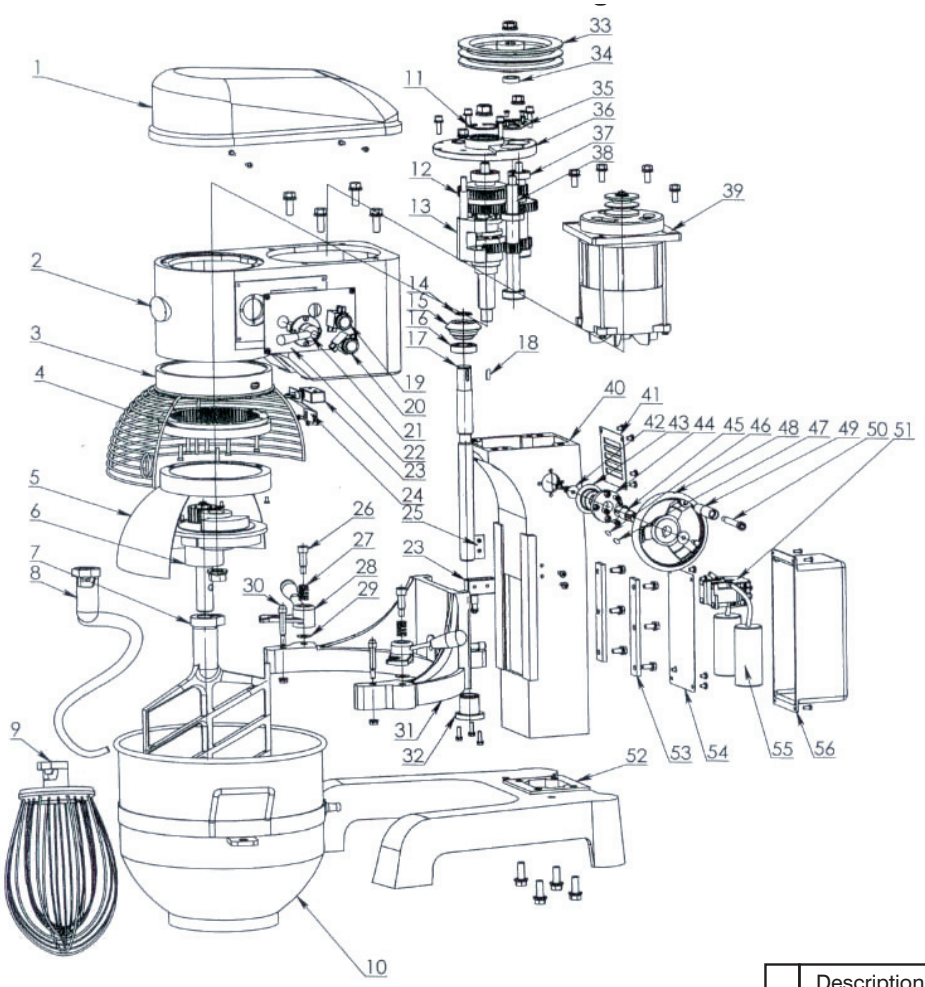
Figure 7: Center Axle 11

Maintenance and Protection..... 12

Troubleshooting 13

Warranty Information 13

Parts Overview



	Description	Qty
1	Top cover	1
2	Gear box	1
3	Safety net(move)	1
4	Inner gear	1
5	Safety net(fixedly)	1
6	Turning plate	1
7	Mixing device Ⅰ	1
8	Mixing device Ⅱ	1
9	Mixing device Ⅲ	1
10	Bowl	1
11	Stop ring 52	1

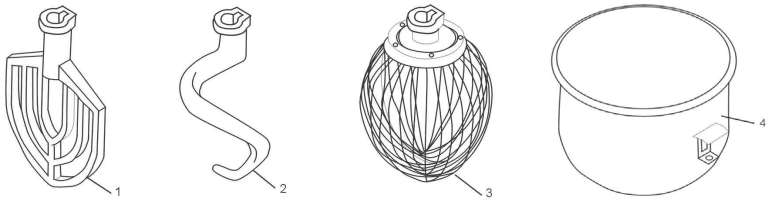
	Description	Qty
12	Centre axle	1
13	Fork	1
14	Stop ring 25	1
15	Big taper gear	1
16	Bearing 6204	1
17	Thread bar	1
18	Key 5*20	1
19	Start switch	1
20	Stop switch	1
21	Change speed axle	1
22	Nameplate	1

	Description	Qty
23	Micro-switch	1
24	Micro-switch shelves	1
25	Micro-switch shelves	1
26	Screw	2
27	Spring	2
28	Handle	2
29	Gasket	1
30	Screw	1
31	Arm	1
32	Copper nut	1
33	Big belt wheel	1

	Description	Qty
34	Sleeve	1
35	Board	1
36	Gear box cover	1
37	Gear axle	1
38	Initiative axle	1
39	Motor	1
40	Stand	1
41	Back board	1
42	Gasket	1
43	Small taper gear	1
44	Flange knot	1

	Description	Qty
45	Handwheel axle	1
46	Key 5*15	1
47	Key 6*15	1
48	Handwheel	1
49	Handle sleeve	1
50	Handle axle	1
51	AC contact device	1
52	Seat	1
53	Bar	1
54	Back cover	1
55	Capacitor	1
56	Electric box	1

Standard Accessories

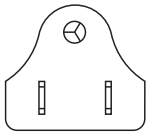


Item	Description	Qty
1	Flat Beater	1
2	Dough Hook	1
3	Wire Whip	1
4	Bowl	1

NOTES:

- Any agitator is easily installed by simply raising it onto the mixing axle, and the rotating it clockwise on the shaft until it locks into place. To remove, raise the agitator on the shaft until it clears the lock and then rotate counter-clockwise and lower.
- All of the accessories are precisely fitted to the bowl, have rounded corners, and are easily removed for cleaning.

Operation Instructions

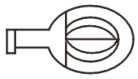


Please ensure that your power supply matches your machine

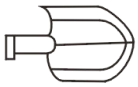
For changing the speed: Please stop machine first before changing speed in order to avoid damage to the gear box. Also make sure that the bowl is in fully lifted position and the guard is closed.

- Slow Speed is the middle, dough hook setting. The knob will be facing forward.
- Medium Speed is the bottom, flat beater setting. The knob will be straight down.
- High Speed is the top, whisk setting. The knob will be straight up.

Mixing: Always use the correct attachment for the job.



A. Wire Whip: Suitable for mixing liquids and soft ingredients, can work in all speeds. Do not run for more than 15 minutes.



B. Flat Beater: Suitable for mixing dry ingredients, can work in low & medium speeds only. Do not use in high speed. Do not run for more than 15 minutes.

C. Dough Hook: Suitable for mixing dough, can work in low & medium speeds only. Do not use in high speed, do not run for more than 20 minutes. Absorption ratio must be more than 50%. Refer to mixer capacity chart.

Mixer Capacity Chart

Product	Agitator and Speed	Maximum Bowl Capacity 30 qt.
Bread and Roll Dough -60 % AR	Dough Hook - 1st only	45 lbs.
Heavy Bread Dough -55% AR	Dough Hook - 1st only	30 lbs.
Pizza Dough, Thin -40% AR	Dough Hook - 1st only	14 lbs.
Pizza Dough, Medium -50% AR	Dough Hook - 1st only	20 lbs.
Pizza Dough, Thick -60% AR	Dough Hook - 1st only	40 lbs.
Raised Donut Dough -65% AR	Dough Hook - 1st and 2nd	15 lbs.
Mashed Potatoes	Flat Beater	23 lbs.
Waffle or Hot Cake Batter	Flat Beater	12 qt.
Egg Whites	Wire Whisk	1.5 qt.
Whipped Cream	Wire Whisk	6 qt.
Cake Batter	Flat Beater	30 lbs.

When mixing dough (pizza, bread or bagels), check your "AR" absorption ratio - water weight divided by flour weight. Above capacities based on 12% flour moisture at 70°F water temperature. If high gluten flour is used, reduce above dough batch size by 10%.

Example: If recipe calls for 5 lbs. of water and 10 lbs. of flour, then 5 divided by 10 = 0.50 x 100 = 50 %AR.

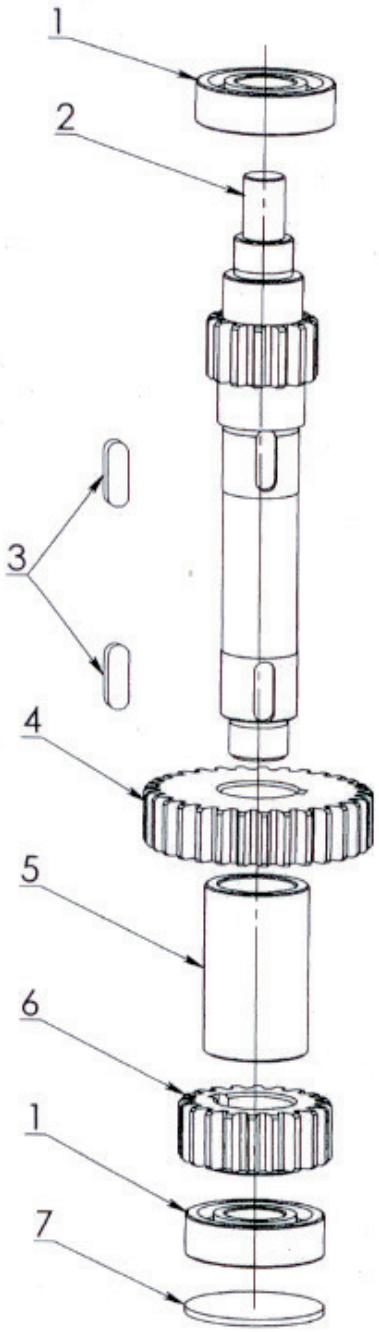
- 2nd Speed should never be used on mixtures with less than 50% AR.
- Do not use attachments on hub while mixing.

When calculating the correct size mixer for your application, here are some helpful weights & measures:

- **8.3 lbs. = 1 gallon of water – 2.08 lbs. = 1 Quart.**

GEAR AXLE

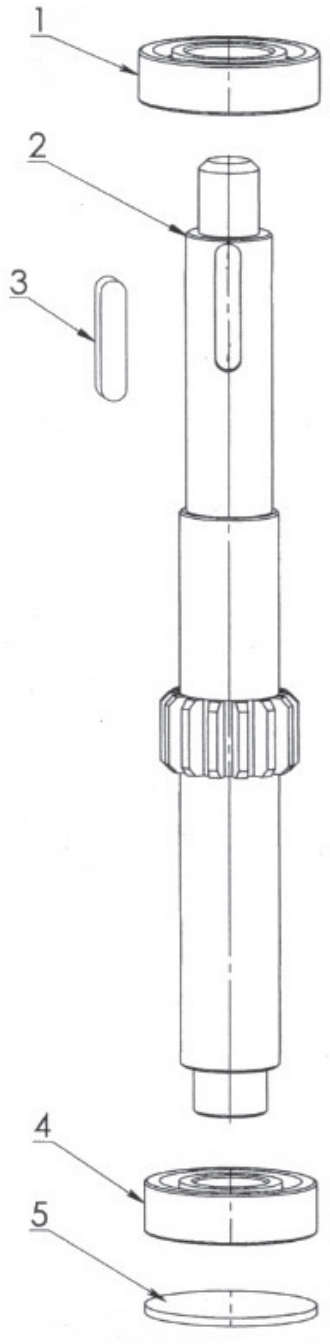
Figure 1



	Description	Qty
1	Bearing 6203	1
2	Gear axle	1
3	Key 6*18	2
4	High-speed gear	1
5	Sleeve	1
6	Low-speed gear	1
7	Gasket	1

INITIATIVE AXLE

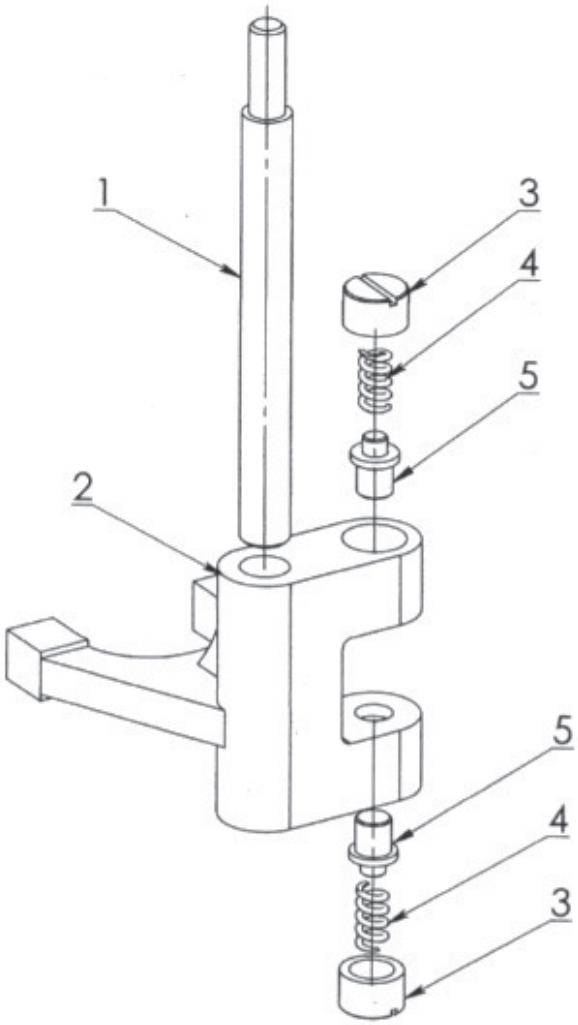
Figure 2



	Description	Qty
1	Bearing 6204	1
2	Initiative axle	1
3	Key 6*28	2
4	Bearing 6203	1
5	Gasket	1

FORK

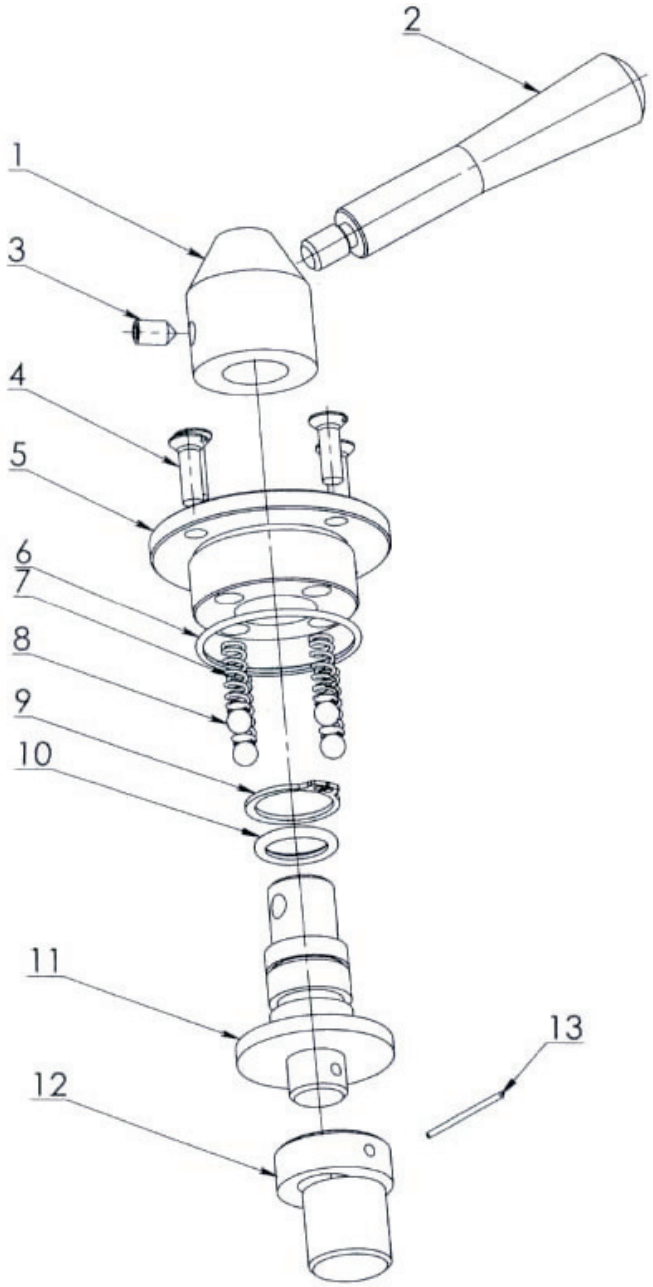
Figure 3



	Description	Qty
1	Fork axle	1
2	Fork	1
3	Nut	2
4	Spring	2
5	Shaft	2

CHANGE SPEED AXLE

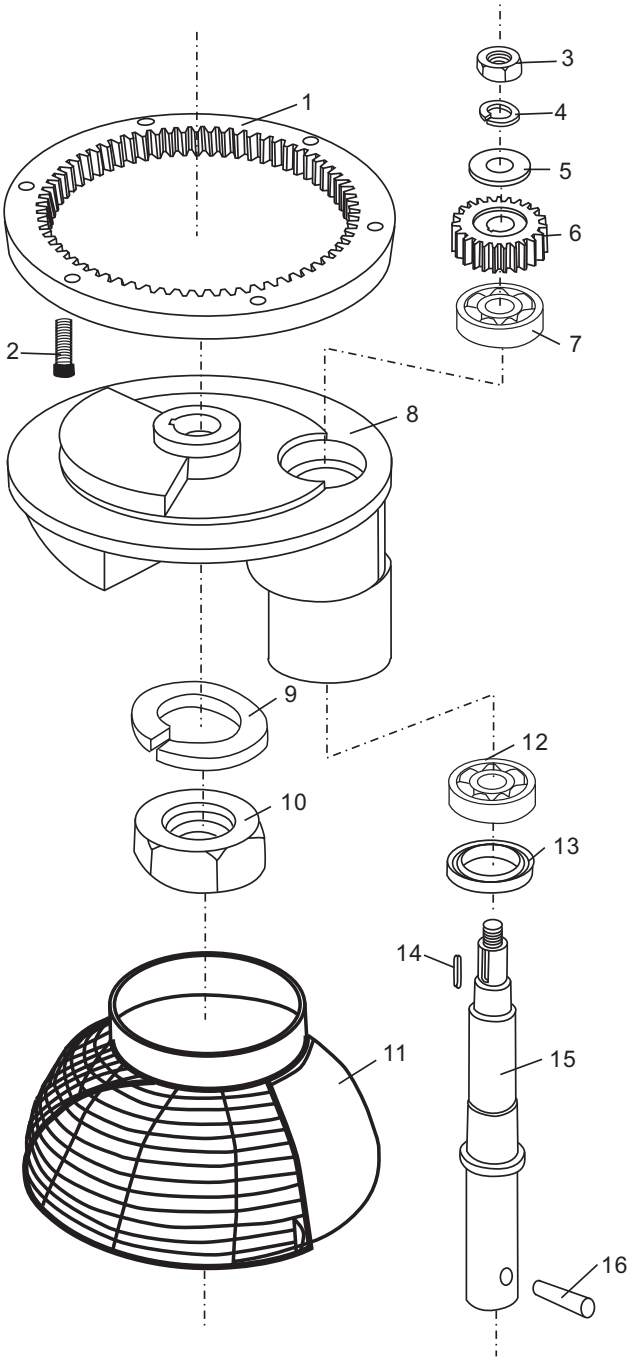
Figure 4



	Description	Qty
1	Handle knot	1
2	Handle	1
3	Screw M6*10	1
4	Screw M5*16	4
5	Speed block	1
6	O ring 36.5*1.8	1
7	Spring	4
8	Steel ball	4
9	Stop ring 20*1.2	1
10	O ring 15*2.65	1
11	Change speed axle	1
12	Eccentricity knot	1
13	Pin 3*25	1

TURNING PLATE AND MIXING AXLE

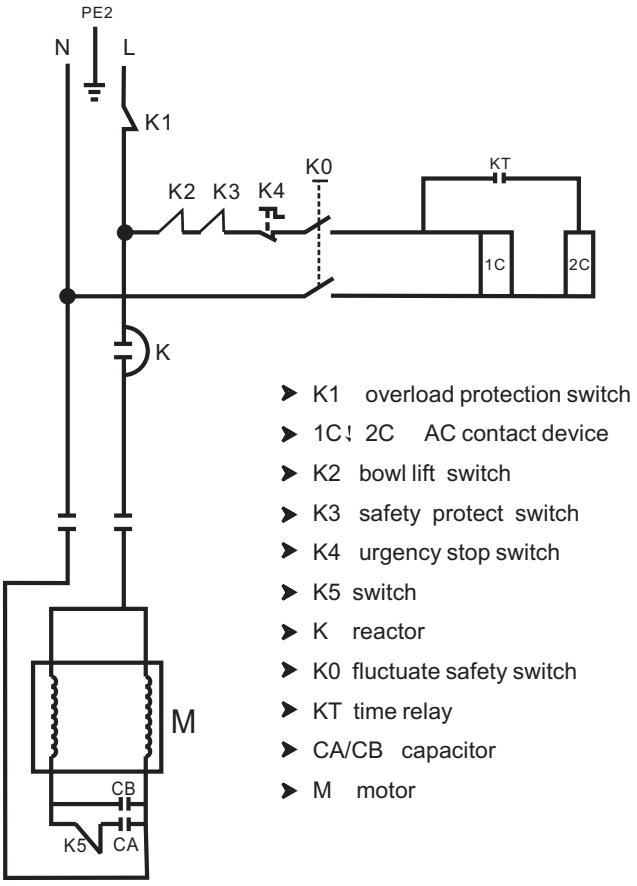
Figure 5



	Description	Qty
1	Inner gear	1
2	Screw	6
3	Nut M14	1
4	Spring gasket 14	1
5	Gasket 14	1
6	Planetary gear	1
7	Bearing 6204	1
8	Turning plate	1
9	Spring gasket	1
10	Nut	1
11	Safe net	1
12	Bearing 6206	1
13	Oil seal 35*56*12	1
14	Key 6*16	1
15	Mixing axle	1
16	Pin 10*37	1

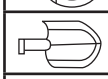
SINGLE PHASE MOTOR DIAGRAM

Figure 6



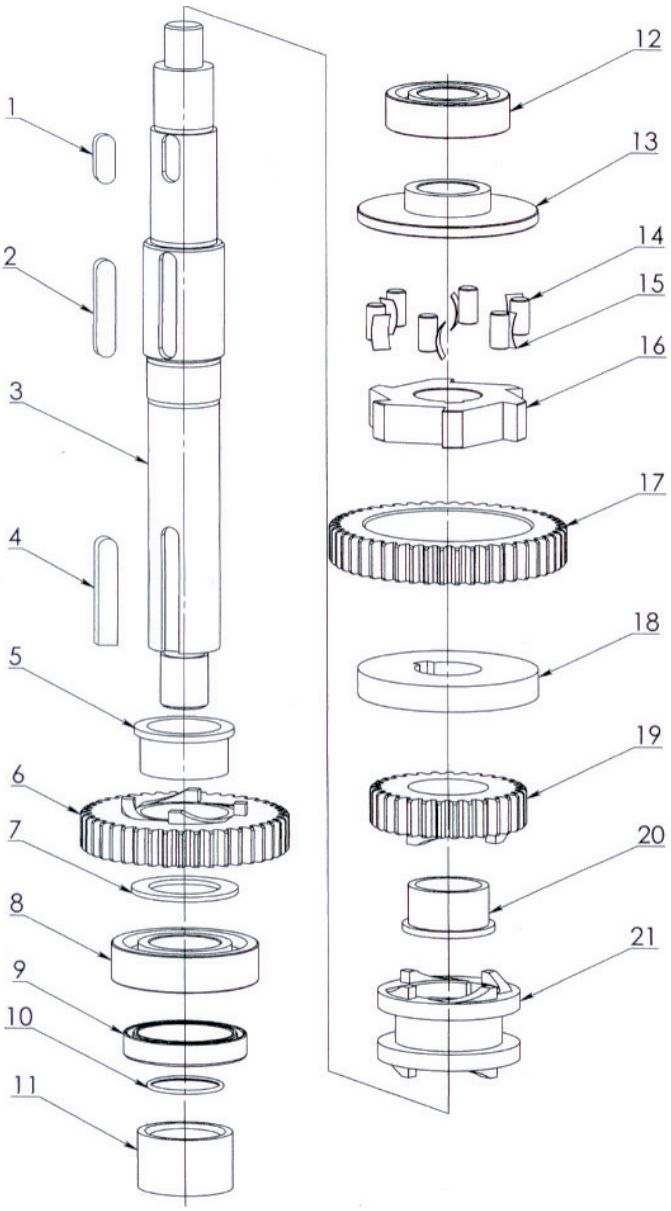
- K1 overload protection switch
- 1C、2C AC contact device
- K2 bowl lift switch
- K3 safety protect switch
- K4 urgency stop switch
- K5 switch
- K reactor
- K0 fluctuate safety switch
- KT time relay
- CA/CB capacitor
- M motor

SPECIFICATIONS

Type		MX30
Capacity (Qt)		30
Power Supply (V)		110
Input Power (W)		1300
Mixing Speed (r.p.m.)		516
		245
		150
Max Flour Capacity (kg)		15
HP		1.5

CENTER AXLE

Figure 7



	Description	Qty
1	Key 8*7*20	1
2	Key 8*7*45	1
3	Centre axle	1
4	Key 8*7*50	1
5	Bearing ring	1
6	Gear	1
7	Gasket	1
8	Bearing 6206	1
9	Oil seal 40*52*10	1
10	O ring 30*1.8	1
11	Sleeve	1
12	Bearing 6205	1
13	Cover	1
14	Roller	5
15	Spring	10
16	Engager	1
17	Gear ring	1
18	Dividing ring	1
19	Gear	1
20	Above bearing ring	1
21	Joint	1

Troubleshooting

Trouble	Possible Causes	Solution
The axles can't work when operating the machine	Poor contact of the electrical equipment	Check the Plug
The mixing bowl is out of position	Moving direction is not correct	Change
Leaks oil	Sealing washer is damaged	Change
Difficult to move the bowl up and down	Slideway is rusted	Clean the slideway and lubricate
The motor is overheated and speed is down	The voltage is not enough, or incorrect speed	Check the voltage or use lower speed
Noise and overheating	Poor lubrication	Add or change lubrication
Mixer touches bowl	The mixing device or bowl deformed	Repair or change the bowl or mixing device

Limited Warranty

All equipment, which is sold under Avantco trademark and used for commercial purpose is warranted against defects in materials and workmanship. The warranty runs for one year from the date of original installation and is for the benefit of the original purchaser only. All other Warranties, Expressed or Implied, Statutory or Otherwise, including Without Limitation any implied Warranty of Merchantability or Fitness for Purposes are excluded. The Seller shall in no event be liable for direct, indirect or consequential damages in connection with Avantco commercial products.

This warranty is not effective if damage occurs because of accident, carelessness, improper installation, lack of proper set – up, supervision when required or if the equipment is installed or operated in any manner contrary to the installation and operating instructions. In these cases, repairs will be made at a reasonable cost. Work performed by unauthorized personnel or unauthorized service agencies voids this Warranty.

Items not covered under warranty:
Changing Gears on the Mixers while Unit is Running and Overloading as Determined by an Approved Certified Technician.

This warranty does not apply to, and Avantco is not responsible for, any warranty claims made on products sold or used outside of the United States.